

REMARKS

This amendment and the enclosed remarks are submitted with a request for continued examination of the application. Claims 1-44 are now pending in the application. Claims 1, 8, 10, 17, 19, 26, 32, and 37 have been amended herein. Favorable reconsideration of the application, as amended, is respectfully requested.

I. ALLOWABLE SUBJECT MATTER

Applicants acknowledge with appreciation the allowance of claim 36. Applicants believe that other pending claims (i.e., claims 1-35, and 37-44) are also in condition for allowance for at least the reasons set forth below.

II. OBJECTION OF CLAIM 31

Claim 1 stands objected to due to informality. Claim 1 has been amended herein to address the Examiner's concern. Withdrawal of the objection is respectfully requested.

III. REJECTIONS OF CLAIMS 1-35 AND 37-43 UNDER 35 U.S.C. § 103

Claims 1-6, 8-15, 17-24, 26-35, and 37-42 stand rejected under 35 U.S.C. § 103 based on a combination of U.S. Patent No. 5,473,599 (Li) and U.S. Patent No. 6,512,774 (Vepa). Claims 7, 16, 25, second claim 31, and 43 stand rejected under 35 U.S.C. § 103 based on a combination of Li, Vepa, and U.S. Patent Publication No. 2002/0120697 (Generous). All pending claims are believed to be allowable for at least the following reasons. Essentially, it is not seen how the ARP features of the independent claims are taught by Li or how either reference suggests linking the ARP protocol to load balancing. Withdrawal of the rejection is respectfully requested.

The present invention as recited in independent claims 1, 8, 10, 17, 19, 26, 32, 34, 36, and 37 is directed to providing gateway services to hosts. Most of these claims recite load balancing gateway services. Independent claim 1 requires, *inter alia*, "*in response to the received ARP message*," and based on load balancing considerations, selecting one of the plurality of gateway devices." Other independent claims 8, 10, 17, 19, 26, 32, 34, and 37 contain recitations similar to those of independent claim 1.

None of the cited references employ a received ARP message as a triggering event for selecting a gateway device. Further, no combination of the cited references suggests that such a triggering event using a received ARP message could or should be integrated with a load balancing algorithm.

The Li patent was cited as allegedly describing receiving an ARP message from a host. As a preliminary matter, there are only a couple of occurrence of the term "ARP" in the Li patent. Based on limited disclosure of ARP mechanism, the Office Action alleges that the router is "assumed to receive an ARP message," and "assumed to reply to the ARP message." However, there are many ways to implement ARP mechanism. Hard coding of the mechanism is one way. Sending an ARP message is only one possibility. It is respectfully submitted that it is too much a stretch to assume that silence in the Li patent means use of ARP. Such assumption cannot be legally permissible basis for rejecting claims.

Therefore, the cited portion of Li cannot be said to disclose the above-identified claimed feature of recited in independent claims 1, 8, 10, 17, 19, 26, 32, 34, and 37. Note that while it is not germane to this analysis, the Li patent may well provide coverage that dominates such embodiments.

Regarding the claim limitation *replying to the ARP messages with a reply message identifying the addressee gateway device*, the Action made the following reference to Li:

the router R4-fig.2b is assumed to reply to the ARP message ... ,
see col. 6, lines 46-49, and col. 7, lines 51-54.

Again, the cited material makes no mention of ARP and no ARP reply message can be seen to be reasonably suggested. The Office is invited to explain how an ARP reply message is implicit in this discussion.

The shared virtual address was identified by load balancing as recited in other elements of, e.g., claim 8. The Action relies on Vepa to provide the load balancing aspect of the claims. While Vepa does describe load balancing among network interface cards in a server, there is nothing to suggest that one might want to tie such load balancing operation with an ARP protocol or any other gateway address discovery protocol. Vepa's load balancing occurs when an outgoing data packet (from a server) is detected by a software element in the server (column 9, lines 33-37). See also, column 10, lines 64-65. In general, the Vepa and Generous patents have been carefully reviewed and found not to cure the deficiencies of the Li patent.

The Generous patent was cited as describing classification of failures. However, nothing in the Generous patent suggests the above-identified claimed features of the invention.

With the exception of claim 34, all independent claims at issue recite, generally speaking, an operation or methodology for replying to an ARP message with the identity of a gateway device selected based on load balancing considerations. As explained above, use of the ARP protocol in this manner is not disclosed or suggested by the cited references, alone or in combination. Claim 34 specifies that a gateway device responds to an ARP message by sending a reply message identifying an addressee gateway device, without specifying that the gateway device is identified by load

balancing considerations. Nonetheless, it is believed that this claim is patentable over the cited art, given the art's limited teachings of applying the ARP protocol.

In view of the foregoing, the invention defined in independent claims 1, 8, 10, 17, 19, 26, 32, 34, and 37, and their dependent claims is believed to be patentable over the cited art. Withdrawal of the rejections is respectfully requested.

IV. CONCLUSION

Applicants believe that all pending claims are in condition for allowance and respectfully request a Notice of Allowance at an early date. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 510-663-1100, ext. 245.

Respectfully submitted,
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